

**HIV Seroprevalence and Risk Behaviors
Among Lesbians and Bisexual Women:
The 1993 San Francisco/Berkeley
Women's Survey**

INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

APR 19 1994

UNIVERSITY OF CALIFORNIA

**Surveillance Branch, AIDS Office
San Francisco Department of Public Health
October 19, 1993**

EXECUTIVE SUMMARY

This report presents the findings of a survey of 498 lesbians and bisexual women 17 years of age and older who were randomly sampled at 25 locations in San Francisco and Berkeley, CA during 1993. The survey was conducted by the San Francisco Department of Public Health AIDS Office Surveillance Branch, in collaboration with the Berkeley Department of Health and Human Services and the Division of HIV/AIDS, Centers for Disease Control and Prevention.

The study found that 1.2% of lesbians and bisexual women were infected with HIV, 5.4% had markers for hepatitis B, and 0.4% had markers indicating a history of syphilis. The prevalence of HIV infection did not differ significantly by age, race/ethnicity, or sexual orientation.

The prevalence of HIV infection in this population was more than three-fold higher than that estimated for all adult or adolescent women in San Francisco (0.35%; based on household and street-based surveys, surveys of childbearing women, clinic-based surveys, and screening of blood donors and military recruits).

Lesbians and bisexual women in this survey reported very high levels of injection drug use and unsafe sexual behaviors with male and female partners. A substantial proportion of women reported injection drug use since 1978 (10.4%), and 3.8% reported injecting drugs in the past three years. Among those reporting a history of injection drug use since 1978, 71% reported a history of sharing needles, and 31% reported sharing needles with gay/bisexual men.

Among the 405 women who reported a history of sex with men, many reported unprotected oral (56.3%) vaginal (39%) or anal (10.9%) sex with men during the past three years. Of particular concern, these women reported a high rate of unprotected oral, vaginal, or anal sex with gay/bisexual men (14.6%, 9.6%, 3.2%, respectively) or with male injection drug users (6.4%, 5.2%, 1.7%, respectively) during the past three years.

Among those reporting a history of sex with women, 91.9% reported a history of unprotected oral sex, 28.8% reported unprotected sharing of "sex toys" and 25.2% reported unprotected vaginal fisting during the past three years.

Sixty-eight percent of the women reported that they had been previously tested for HIV antibody. Among the 492 HIV seronegative participants, 32.3% had not previously been tested for HIV, whereas five of the six HIV-infected women had been tested before and were aware of their infection.

The study found no clear evidence of woman-to-woman transmission among the six HIV-infected women in the survey. All of these women reported either a history of injection drug use or a history of anal or vaginal sex with men. Despite the lack of clear evidence of woman-to-woman transmission in this survey, the high rates of injection drug use and unsafe sexual behaviors with male and female partners suggests a potential for continued transmission of HIV in this population.

Previous studies released by the Department of Public Health have shown that focused prevention campaigns have been very successful in San Francisco when targeted to populations at high risk through comprehensive community-based prevention efforts. Although the rates of HIV infection among lesbian and bisexual women are currently low, these rates may rise given the high levels of risk behaviors in this population. These studies suggest that targeted prevention programs should be expanded to address the needs of lesbians and bisexual women.

Objectives

The objectives of the Women's Survey were 1) to estimate the prevalence of HIV infection, and markers for hepatitis B virus and syphilis among women who have sex with women or with men and women, who frequent venues in San Francisco and Berkeley, CA, and who reside in the nine-county San Francisco Bay Area, 2) to estimate the level of risk behaviors in this population, and 3) to measure the association between HIV infection and various factors including sexual and drug histories, HIV antibody testing history, medical history, and demographic characteristics.

Methods

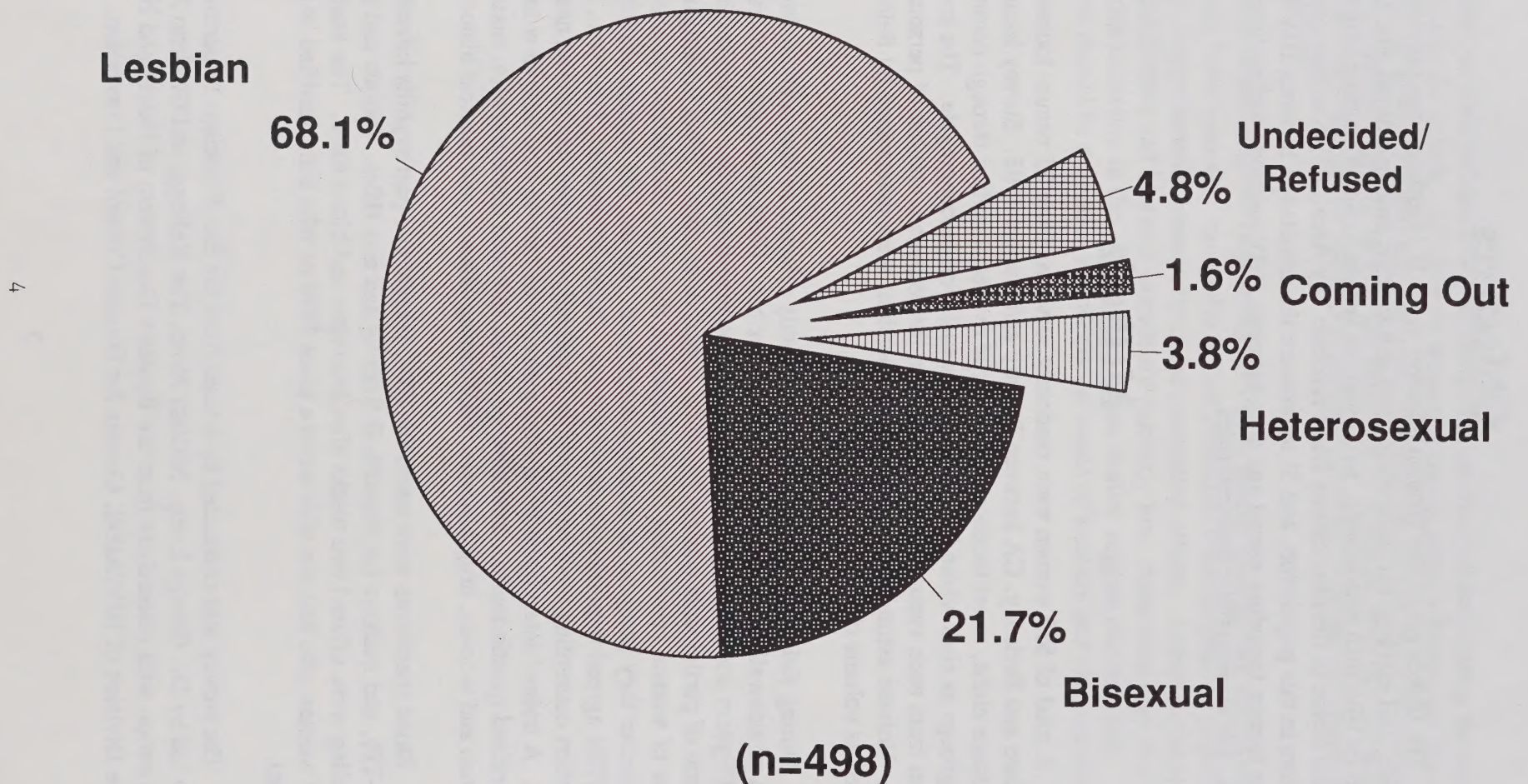
A total of 550 women were randomly surveyed from 25 venues located in San Francisco and Berkeley, CA between January and August 1993. Survey locations included bars, dance clubs, street locations, and special events identified through community-based focus groups as sites where lesbians and bisexual women congregate. The number of women selected from each venue was proportional to the estimated number of persons frequenting the venue. Volume estimates for all sampling locations were determined by field enumeration and adjusted as volume changes occurred.

During field visits, women were randomly selected as they walked down a pre-selected stretch of sidewalk, or as they entered a club or bar. Field investigators recruited women who were 17-years and older, and who resided in the nine-county San Francisco Bay Area. Selection of participants was not based on sexual orientation. Field investigators recorded the number of women approached for participation, their age, race/ethnicity, county of residence, and whether they accepted or declined enrollment. Of the 798 women eligible for the survey, 550 (69%) agreed to participate in the survey. Informed consent, interview, blood draw, and prevention counseling were performed in a specially-equipped van parked near the sampling venue. A trained interviewer conducted a structured face-to-face interview using a standardized questionnaire. Interview questions included demographics, sexual behaviors with both men and women, drug histories, HIV testing history, and medical histories.

Blood specimens were tested for HIV, present and past syphilis infection (VDRL and MHA-TP), and markers for hepatitis B (HBsAg and anti-HBc). Results and post-test counseling were offered two weeks after interview and blood draw. The analysis was limited to 498 women who had sex with women since 1978 or who self-identified as lesbian or bisexual.

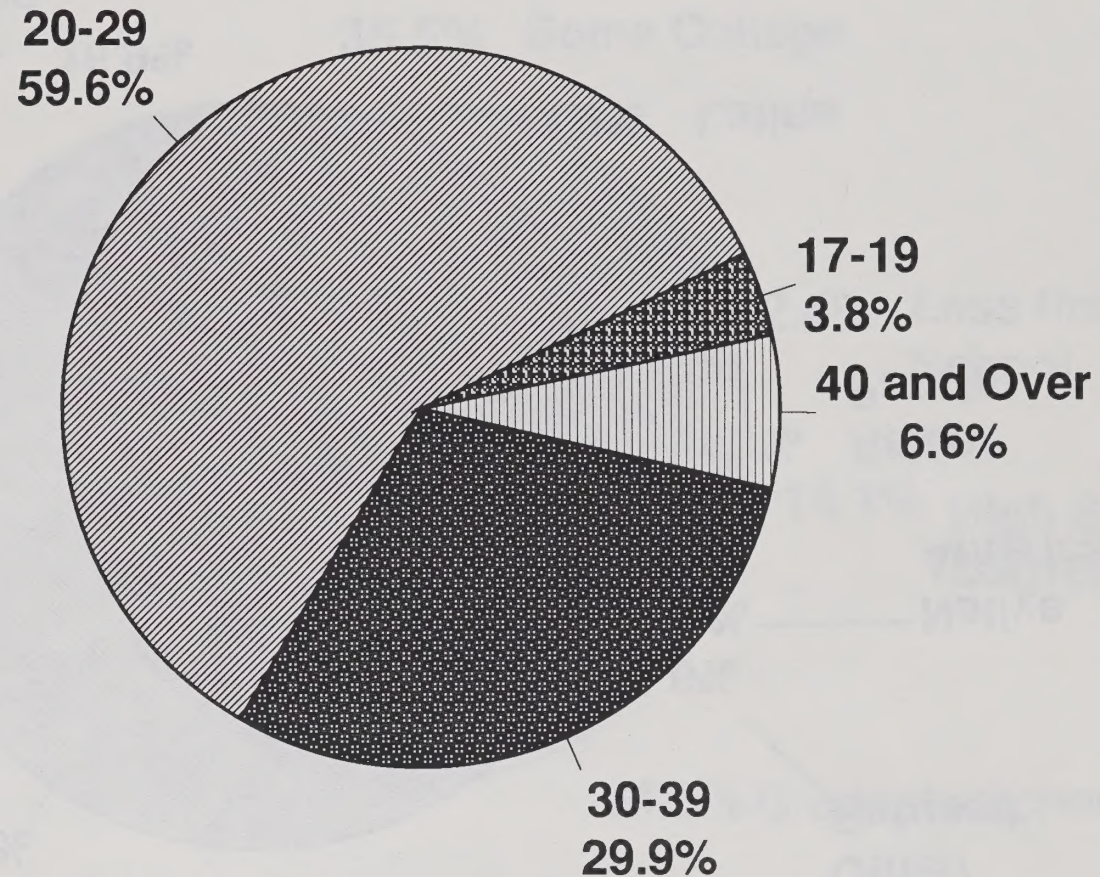
The survey was conducted by a team from the San Francisco Department of Public Health led by Dr. George Lemp, Melissa Jones, Tim Kellogg, and Giuliano Nieri, in collaboration with researchers from the Berkeley Department of Health and Human Services and the Division of HIV/AIDS, Centers for Disease Control and Prevention.

Self-Identified Sexual Orientation of Survey Participants



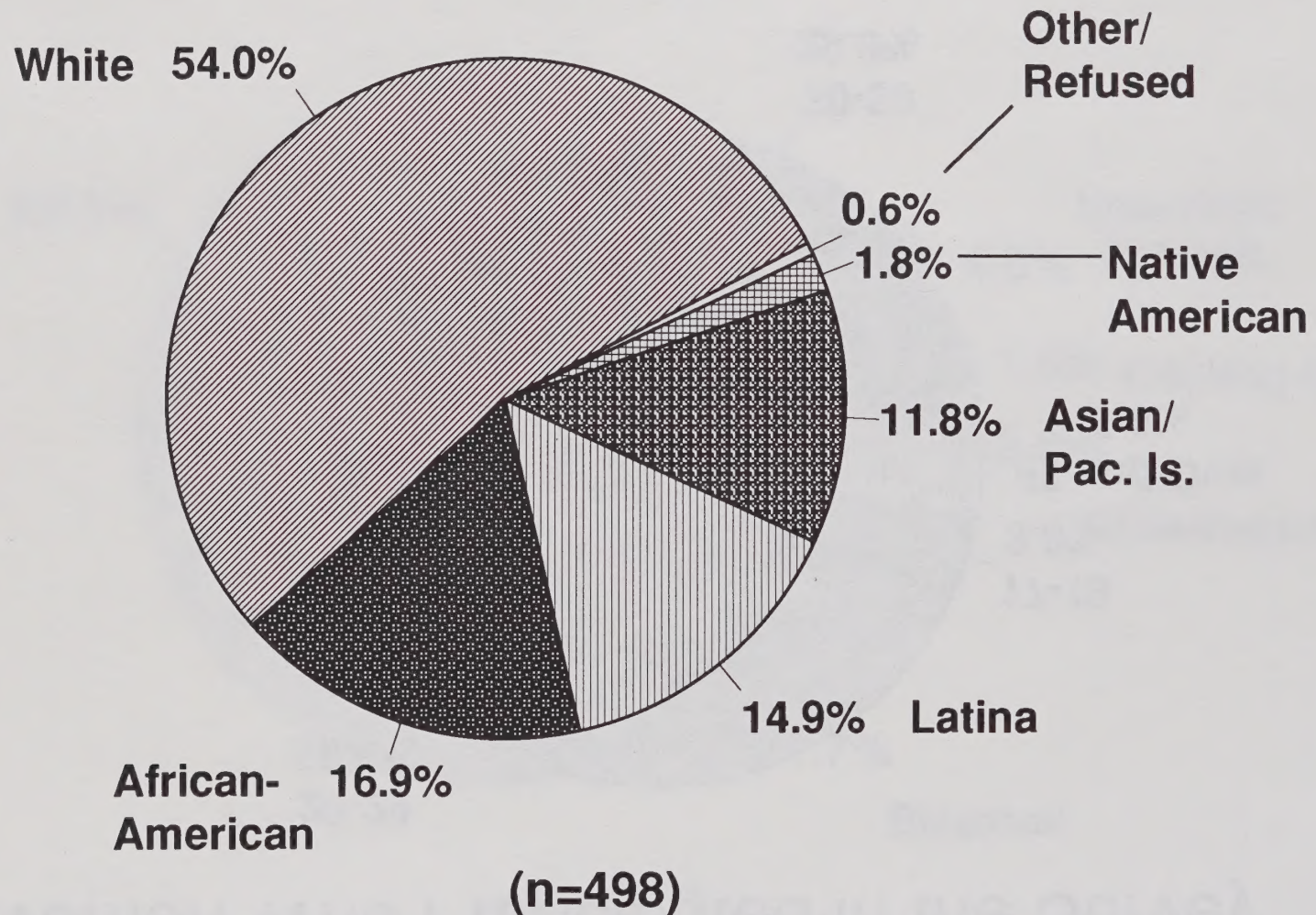
WS: 1993 San Francisco/Berkeley Women's Survey

Age-Group (Years) for Lesbians and Bisexual Women Who Participated in the Survey



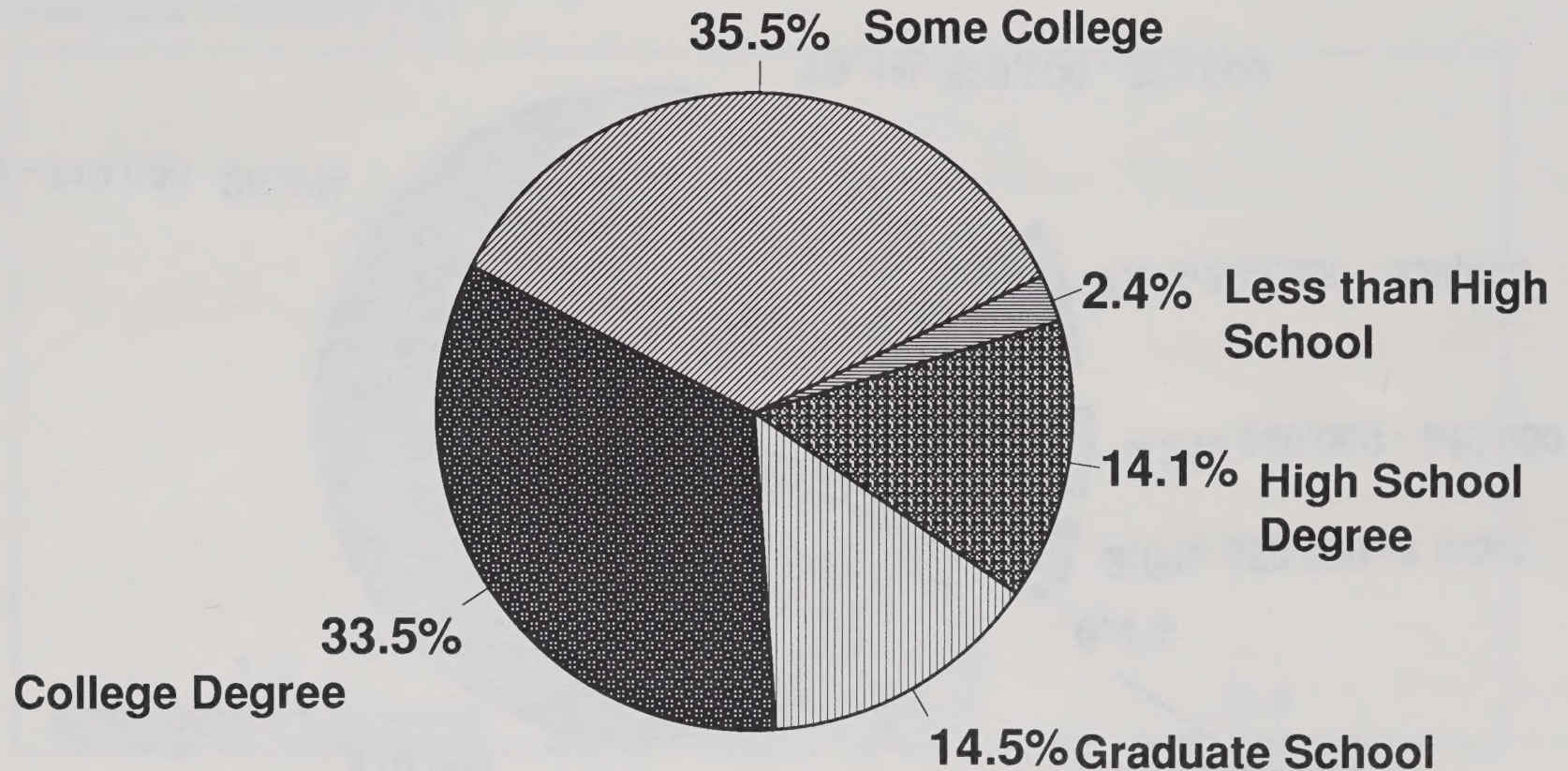
(n=498)

Race/Ethnicity for Lesbians and Bisexual Women Who Participated in the Survey



WS: 1993 San Francisco/Berkeley Women's Survey

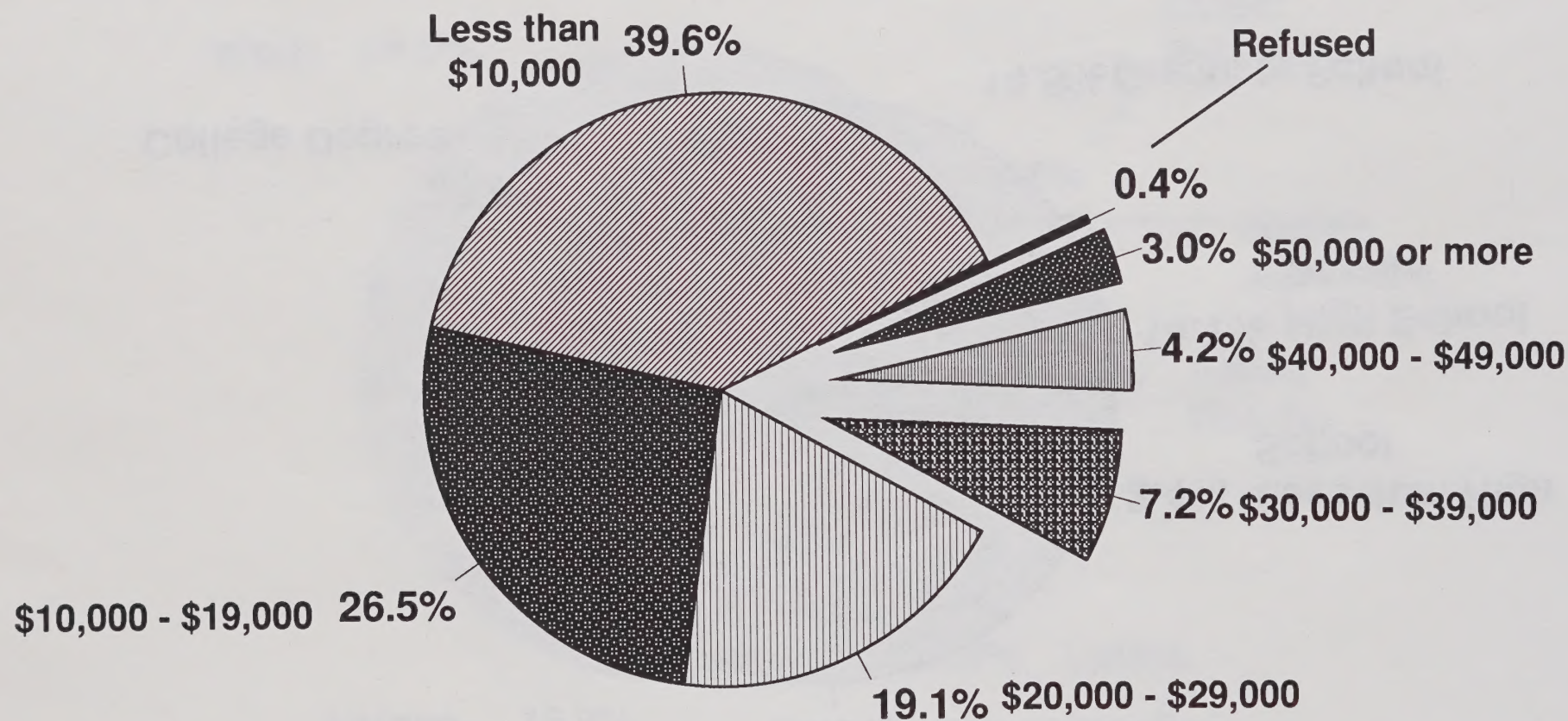
Educational Level of Lesbians and Bisexual Women Who Participated in the Survey



(n=498)

WS: 1993 San Francisco/Berkeley Women's Survey

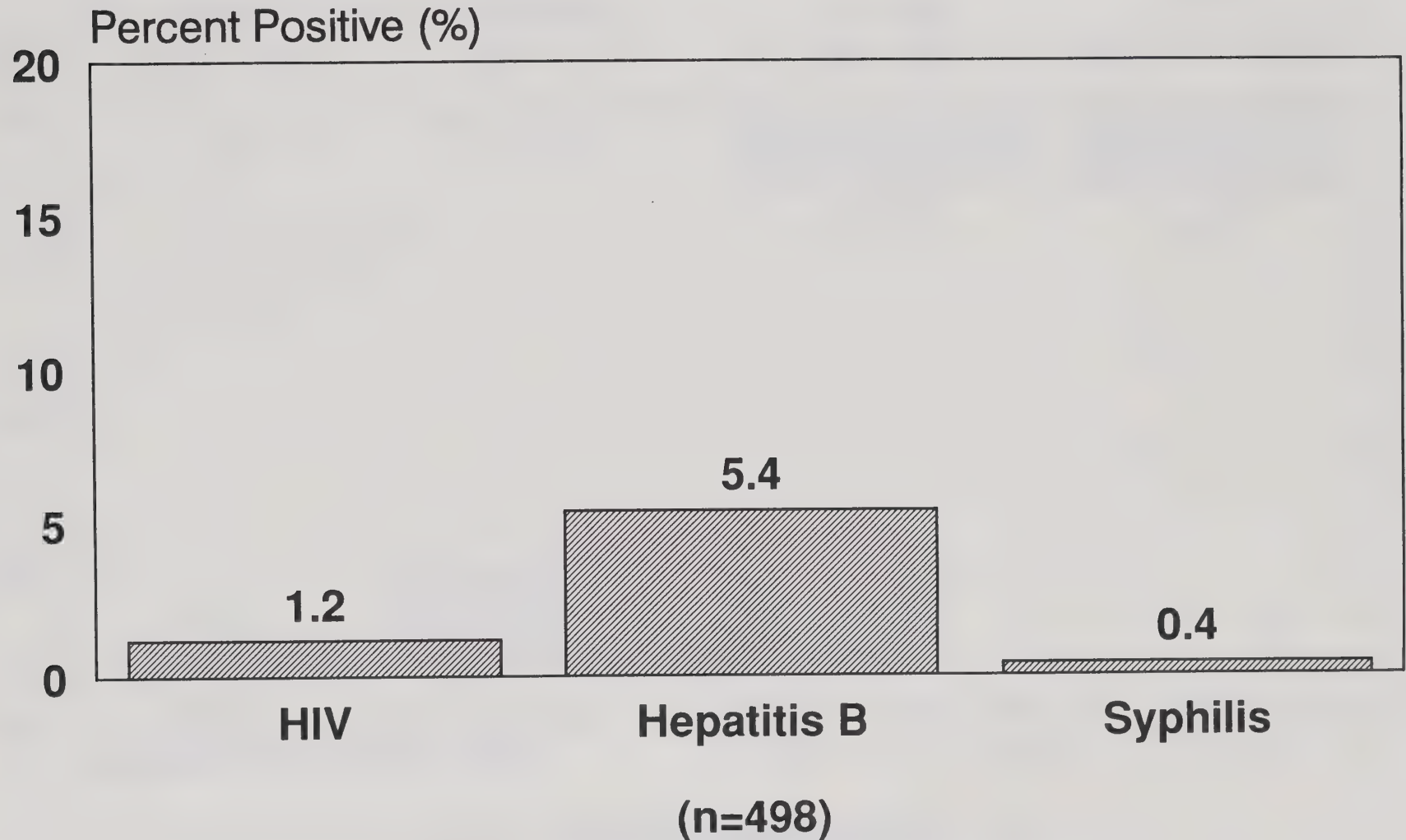
Annual Income of Lesbians and Bisexual Women Who Participated in the Survey



(n=498)

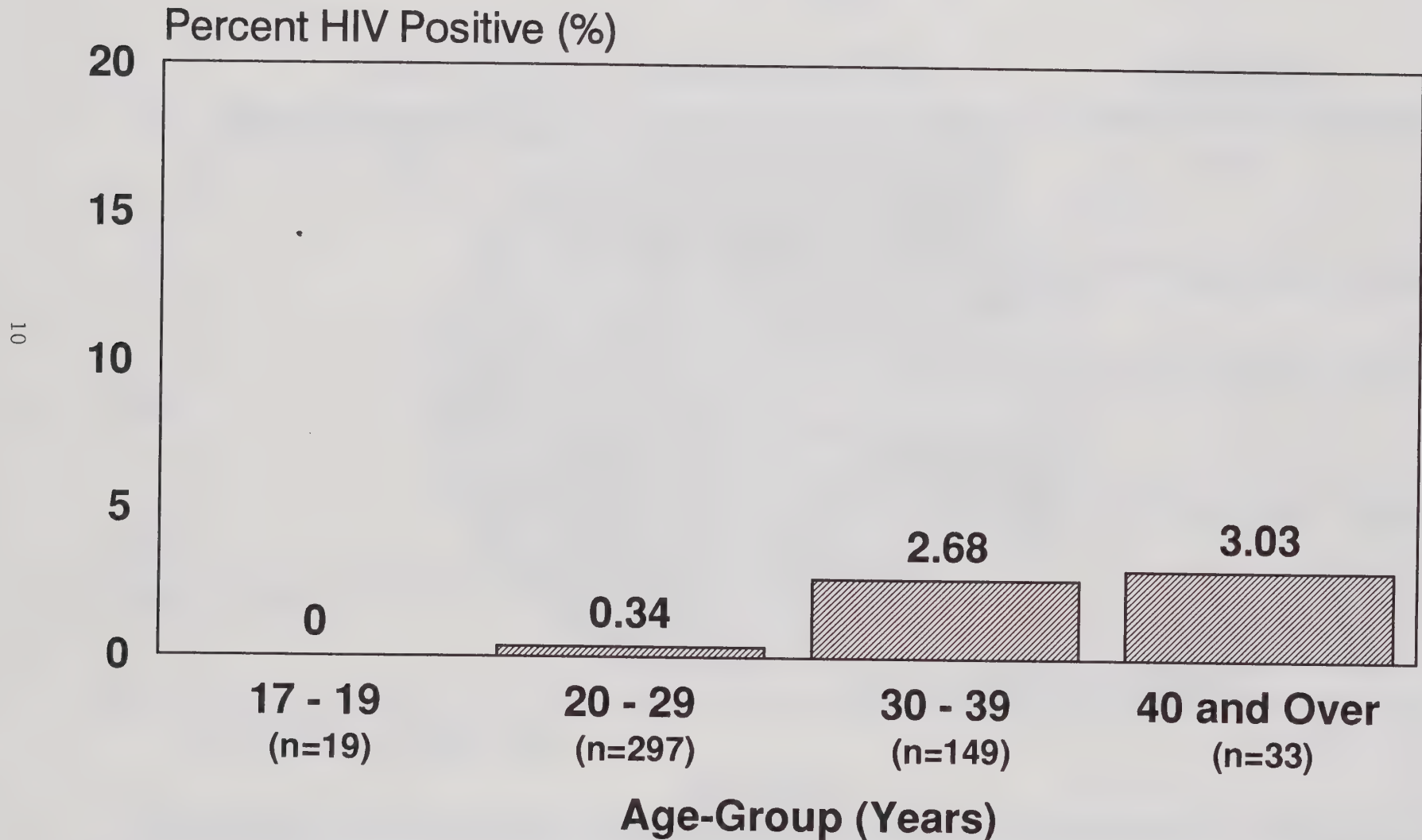
WS: 1993 San Francisco/Berkeley Women's Survey

Overall Seroprevalence of HIV, Hepatitis B, and Syphilis Among Lesbians and Bisexual Women



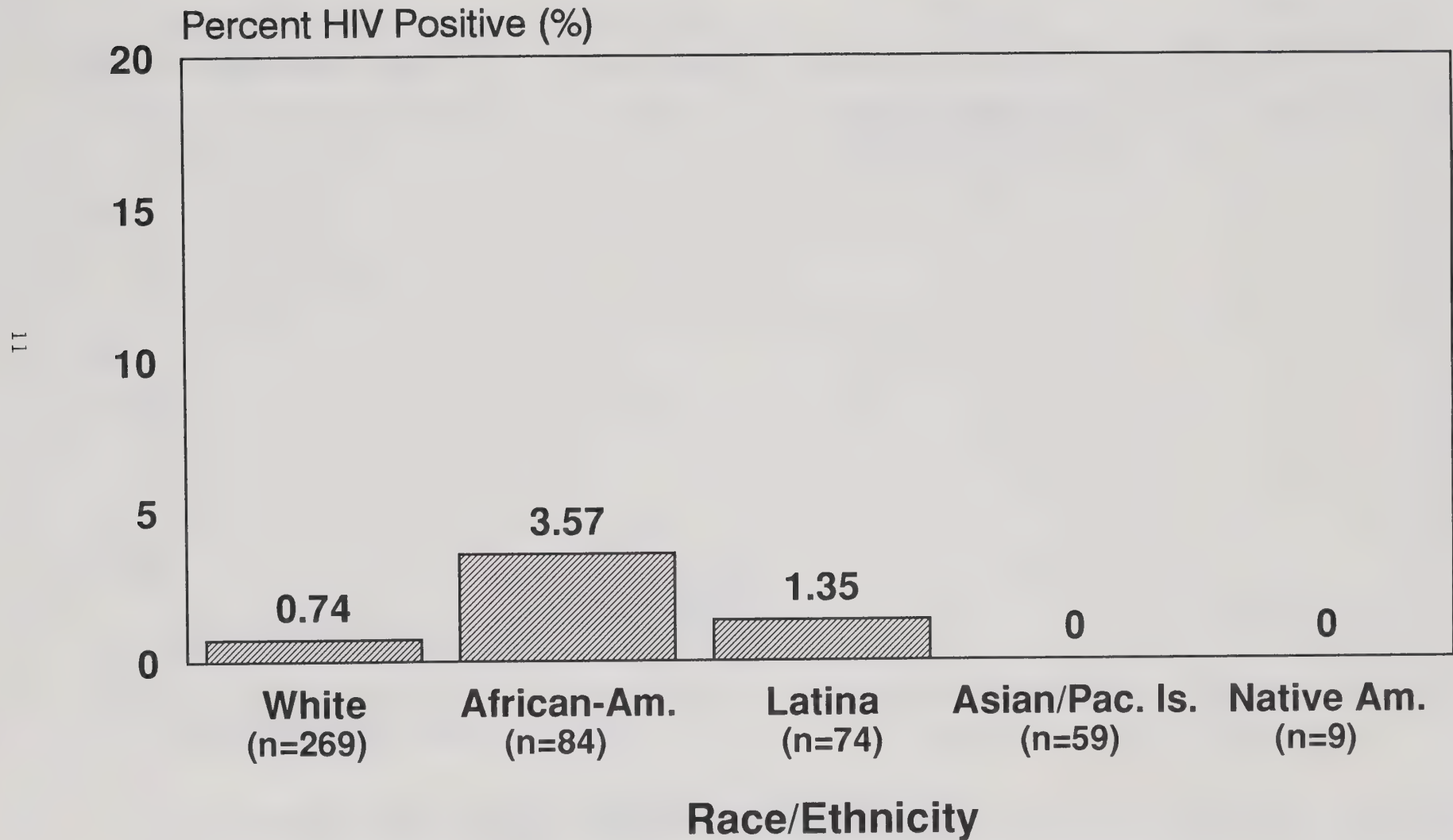
WS: 1993 San Francisco/Berkeley Women's Survey

HIV Seroprevalence Among Lesbians and Bisexual Women by Age-Group



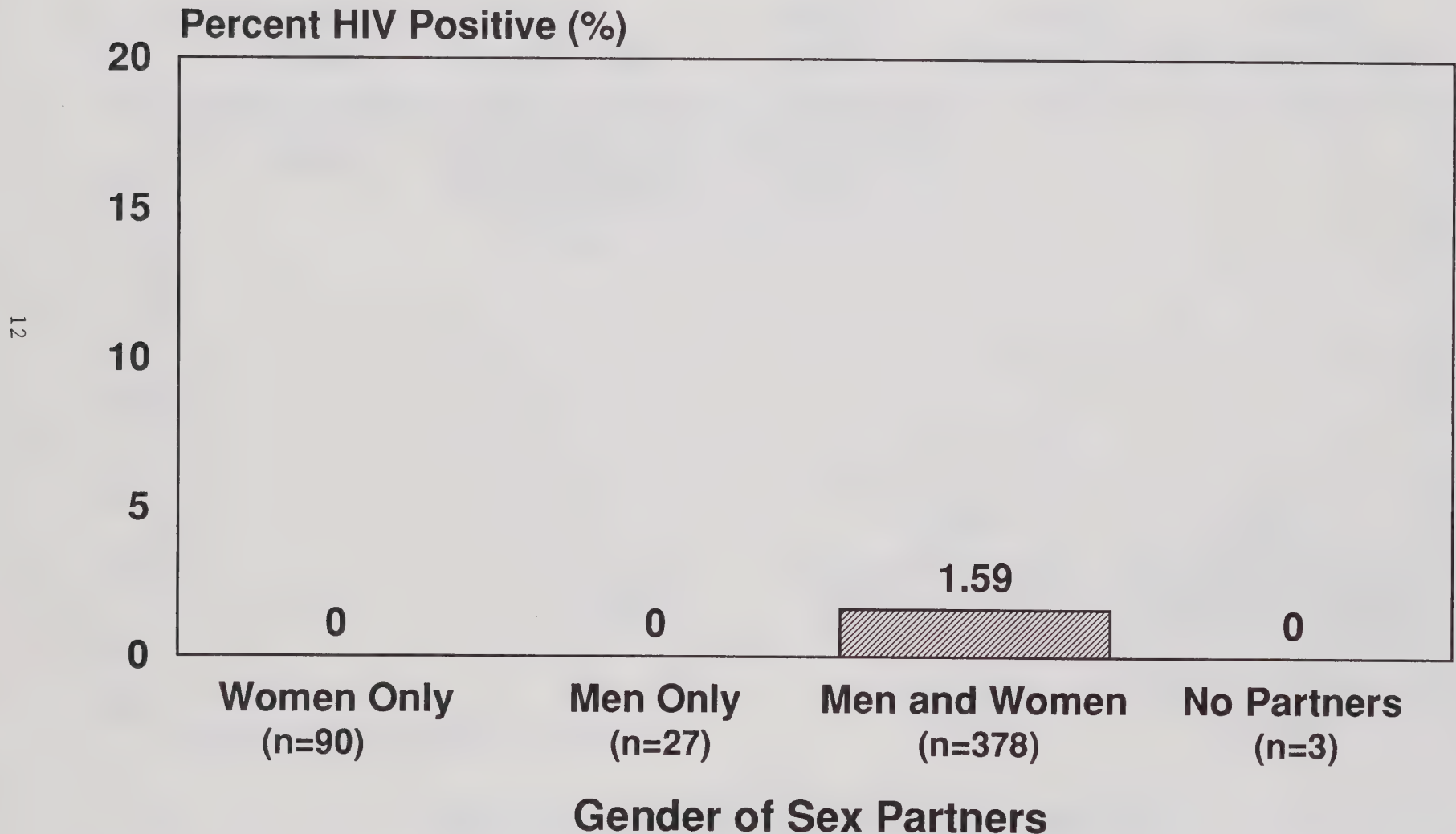
WS: 1993 San Francisco/Berkeley Women's Survey

HIV Seroprevalence Among Lesbians and Bisexual Women by Race/Ethnicity



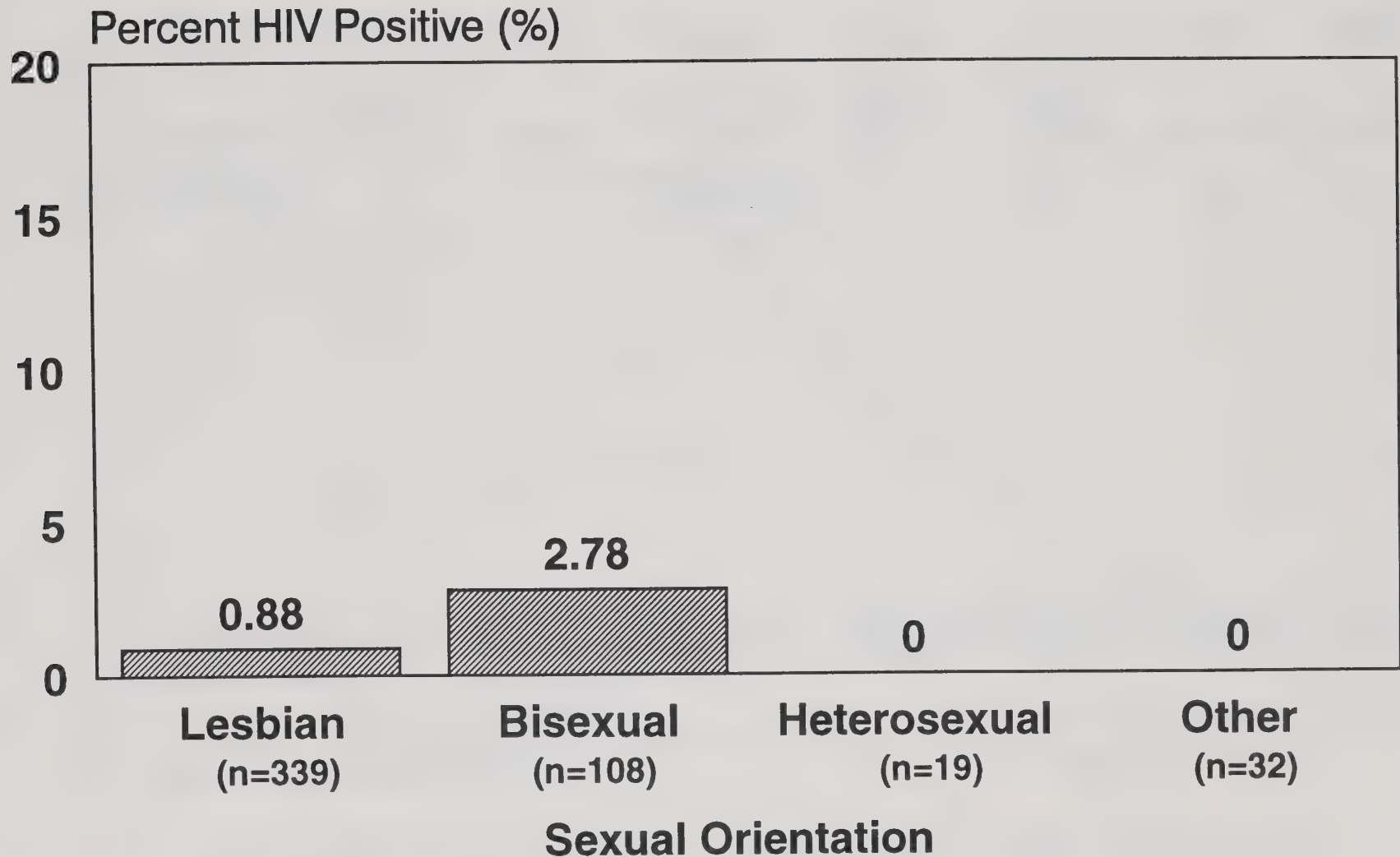
WS: 1993 San Francisco/Berkeley Women's Survey

HIV Seroprevalence Among Lesbians and Bisexual Women by Gender of Sex Partners Since 1978



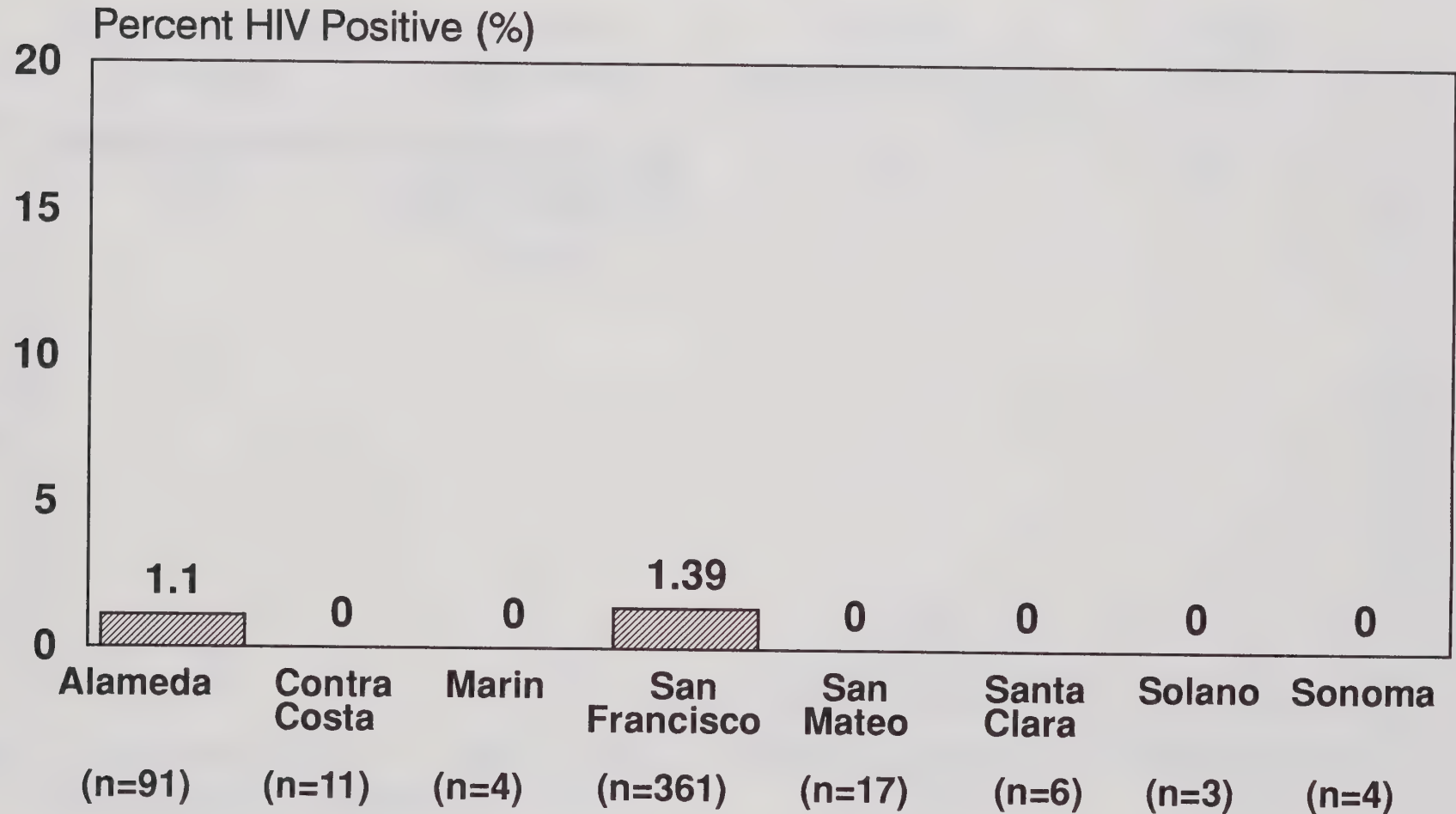
WS: 1993 San Francisco/Berkeley Women's Survey

HIV Seroprevalence Among Lesbians and Bisexual Women by Sexual Orientation

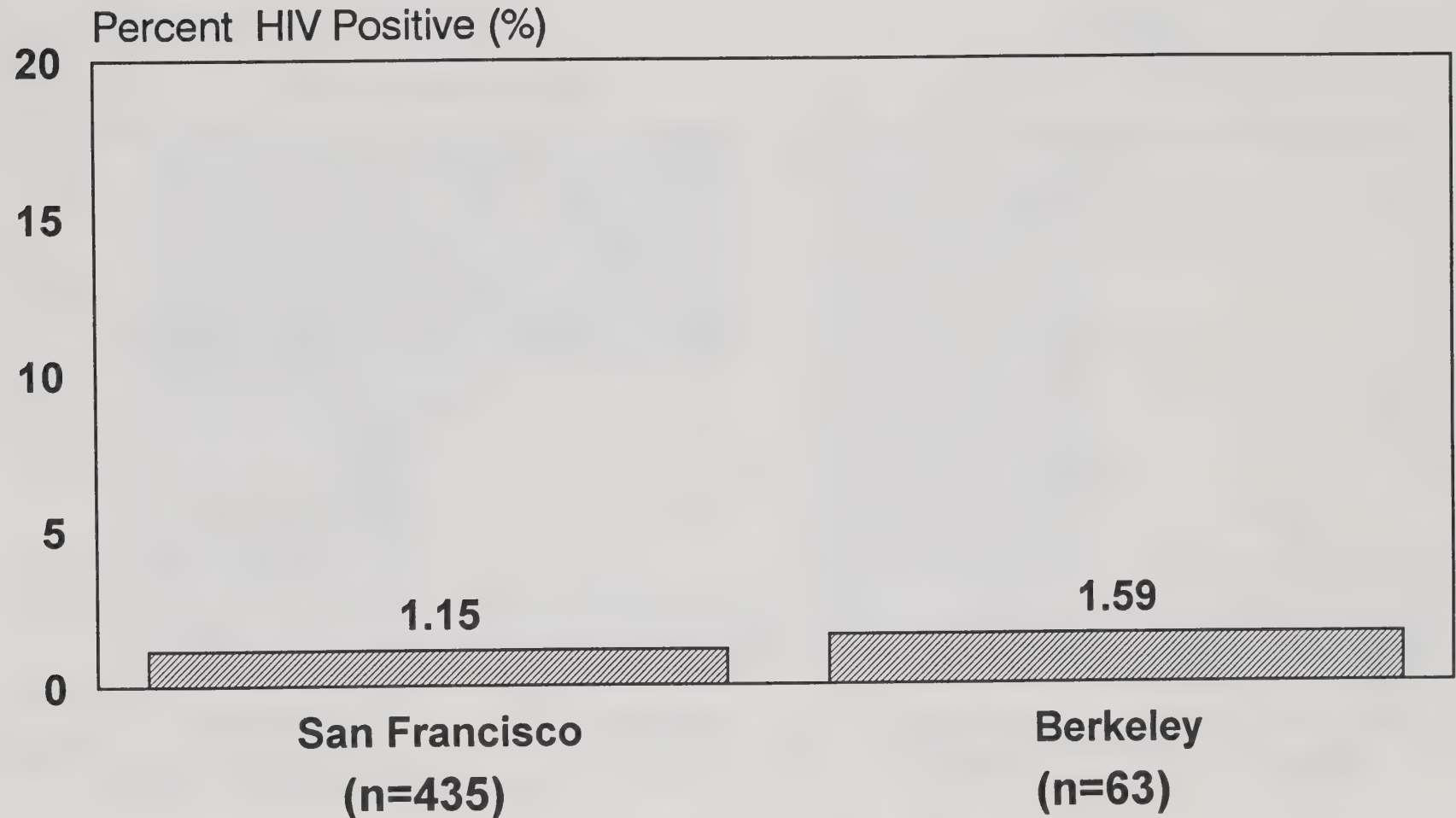


WS: 1993 San Francisco/Berkeley Women's Survey

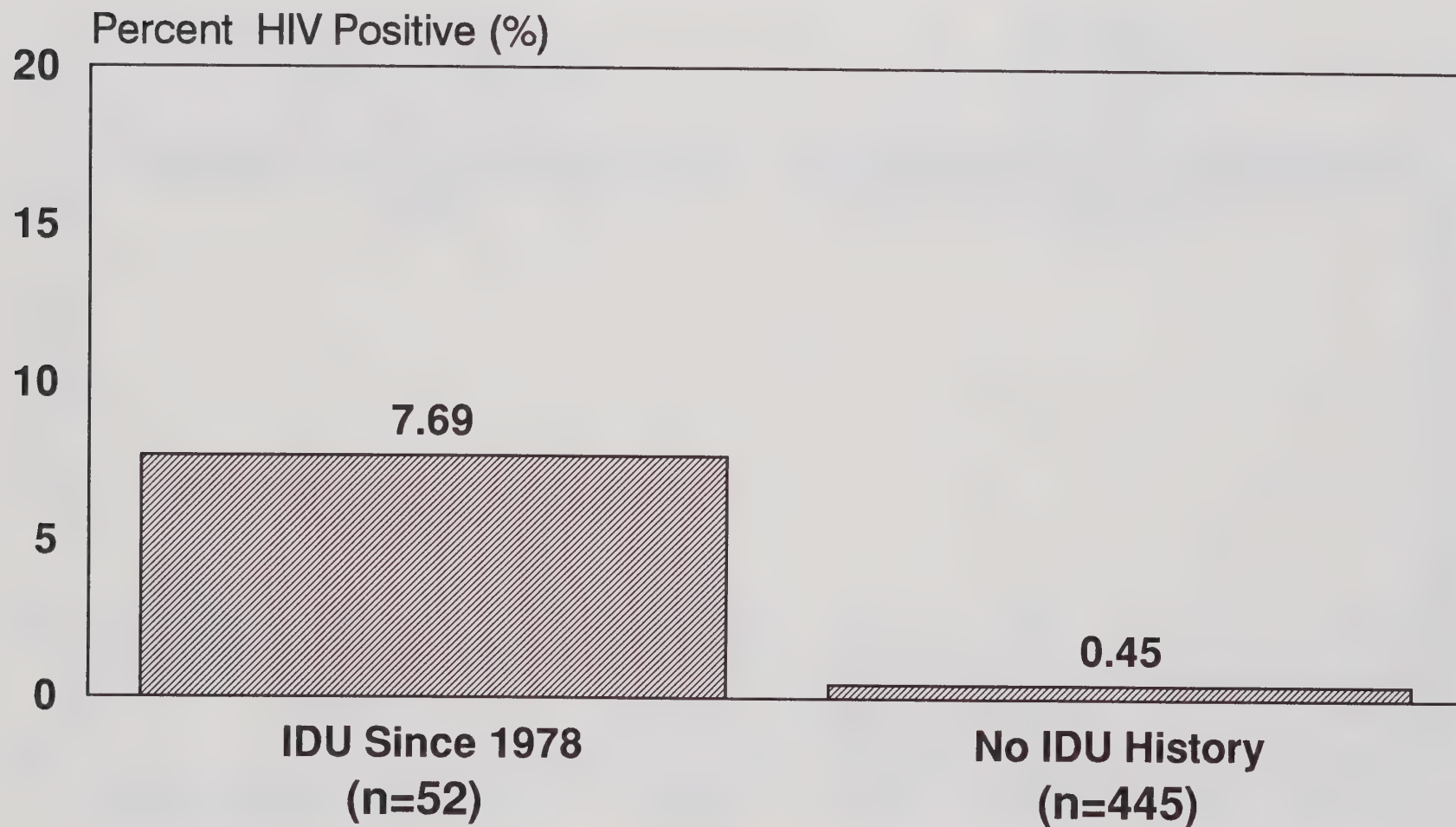
Seroprevalence of HIV by County of Residence Among Lesbians and Bisexual Women



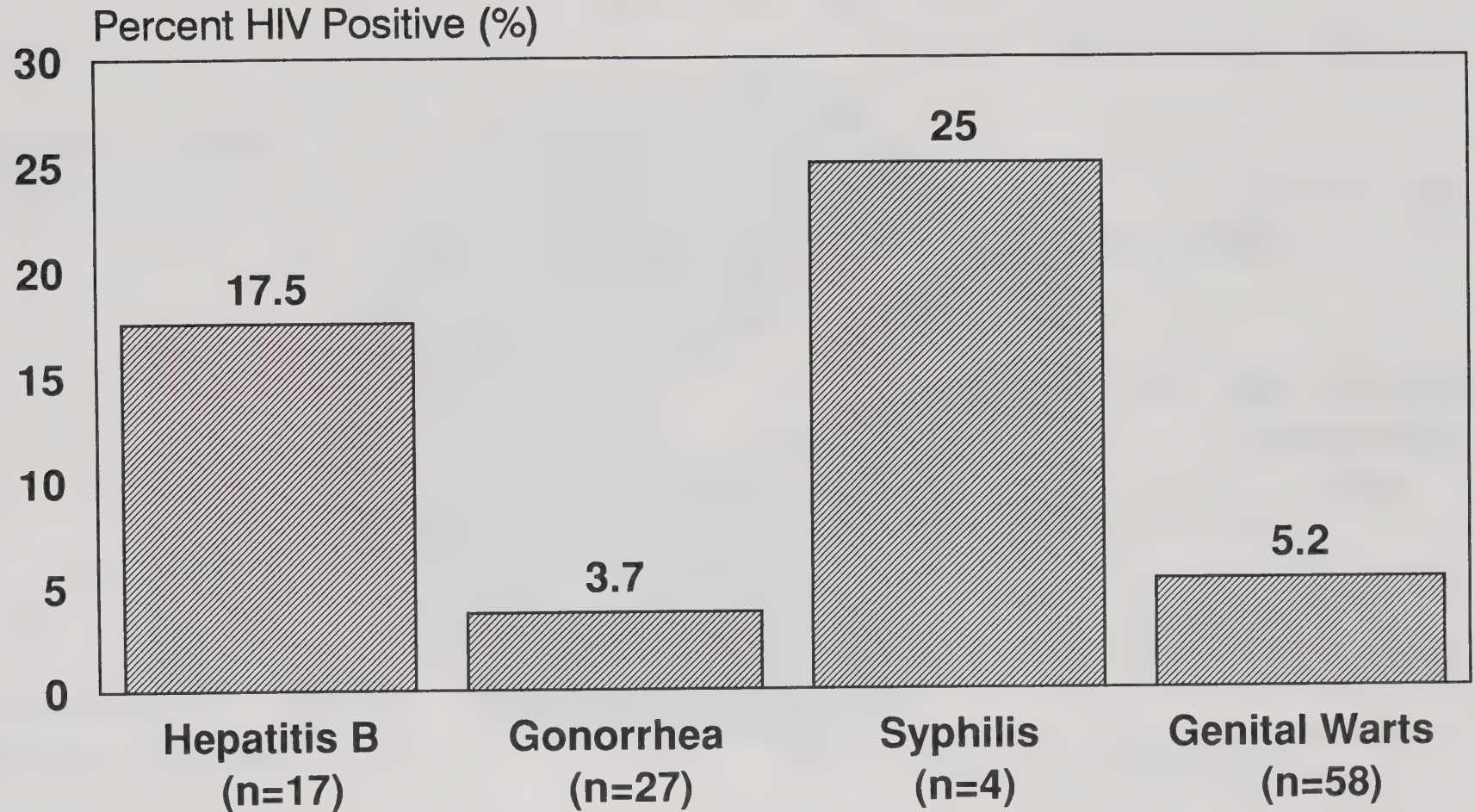
Seroprevalence of HIV by City of Venue Among Lesbians and Bisexual Women



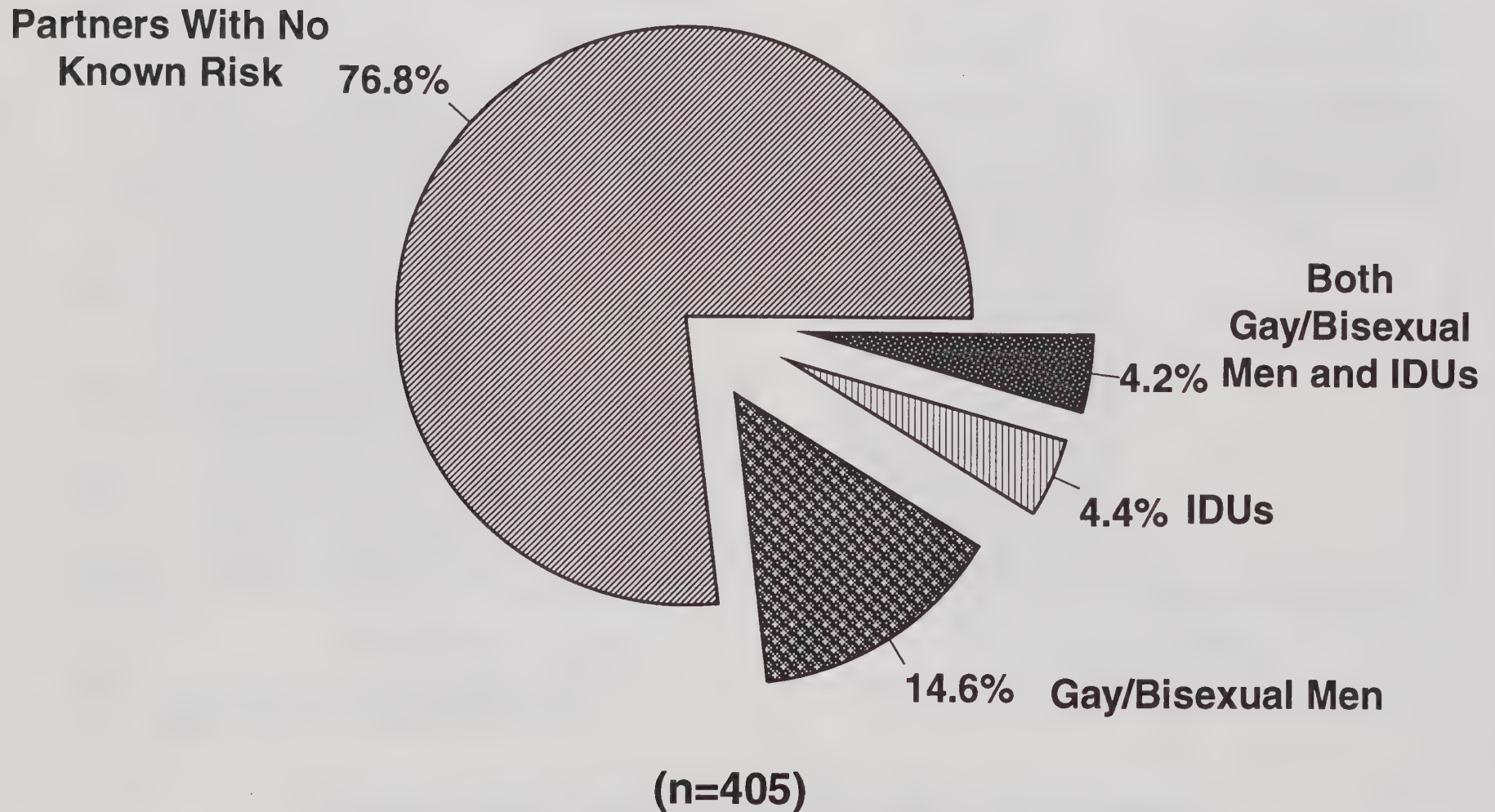
Seroprevalence of HIV by Injection Drug Use (IDU) Among Lesbians and Bisexual Women



Seroprevalence of HIV by STD History Among Lesbians and Bisexual Women

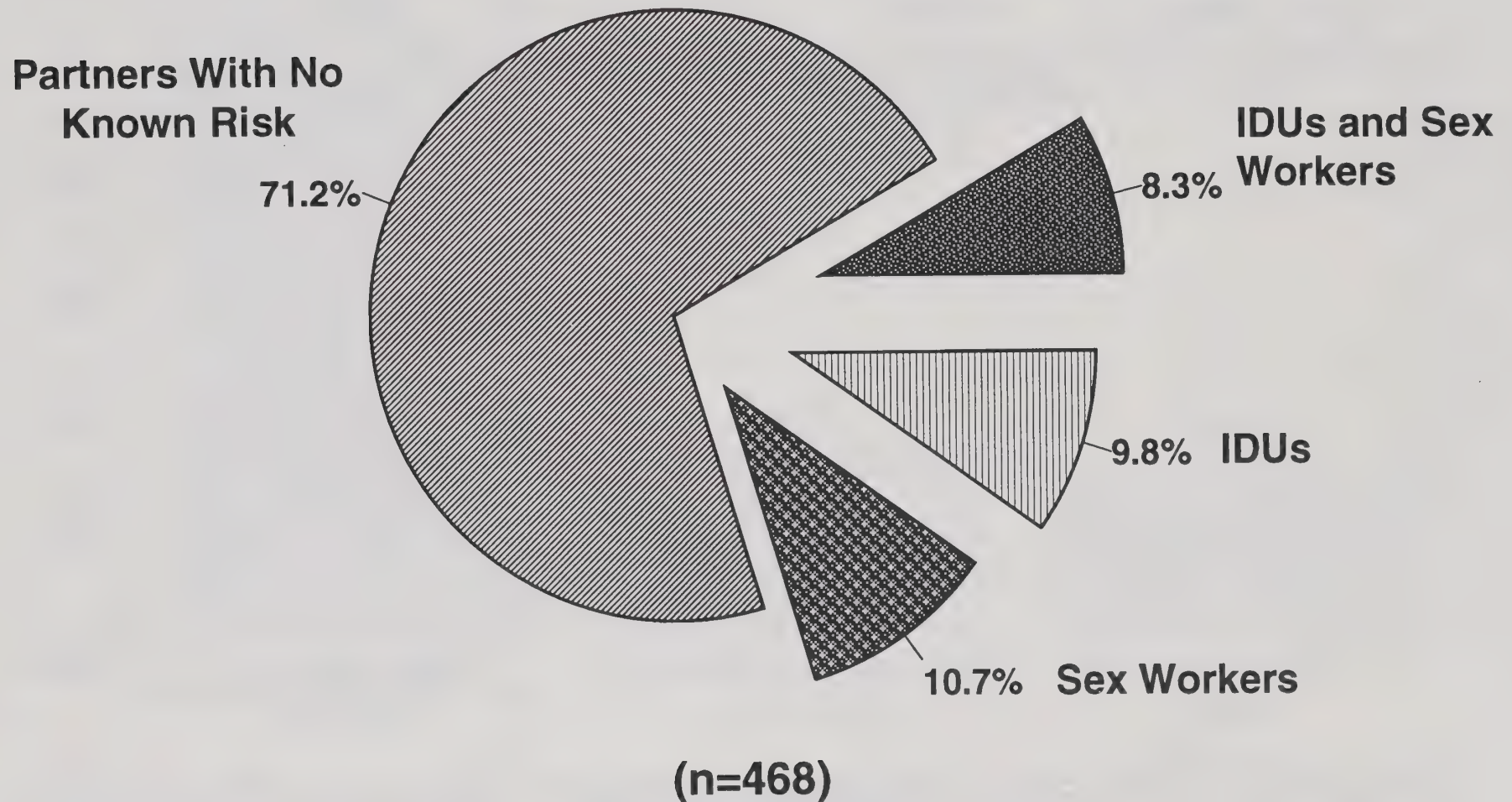


Percent of Participants with Male Sex Partners at Risk for HIV (for women reporting sex with men)

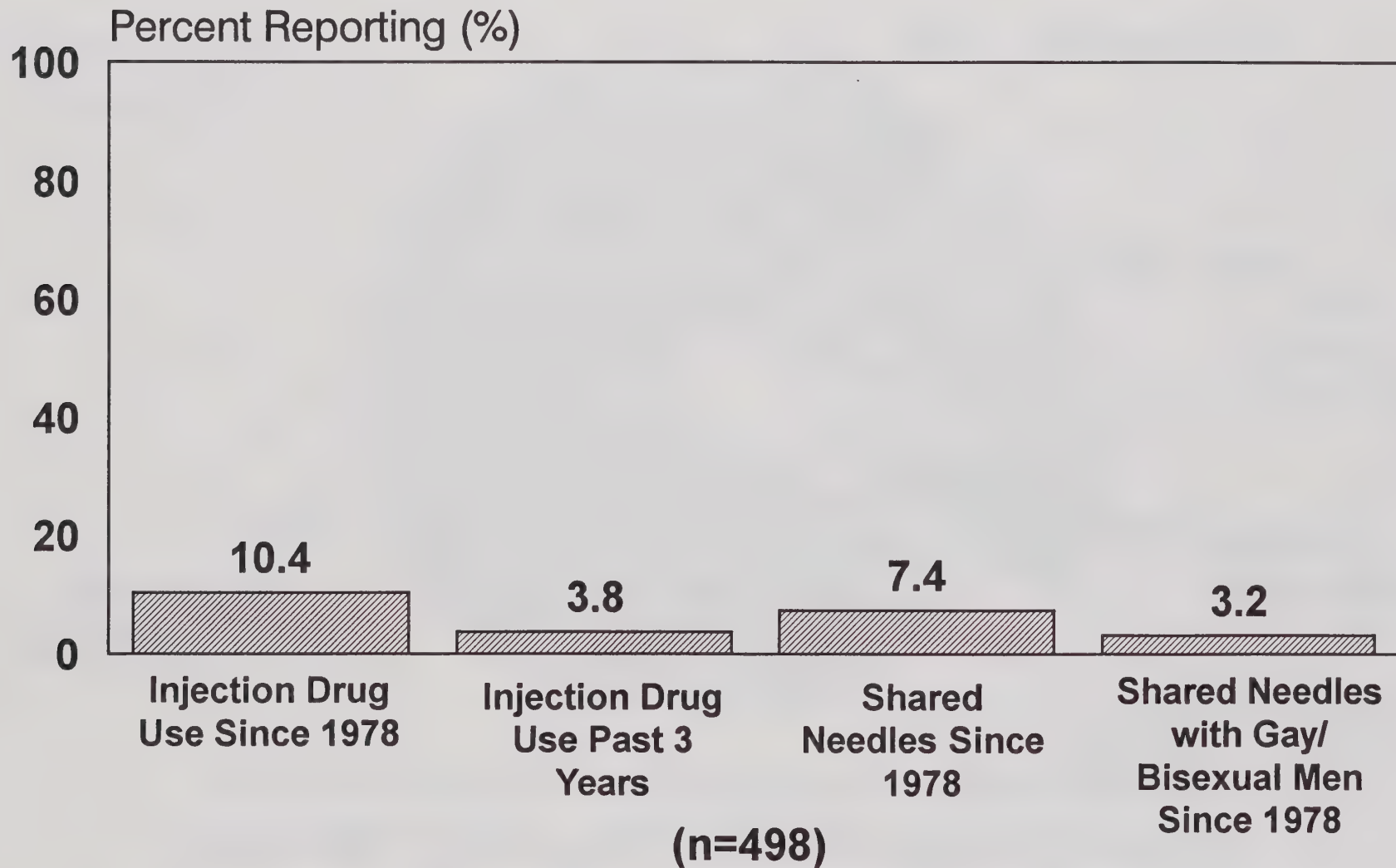


WS: 1993 San Francisco/Berkeley Women's Survey

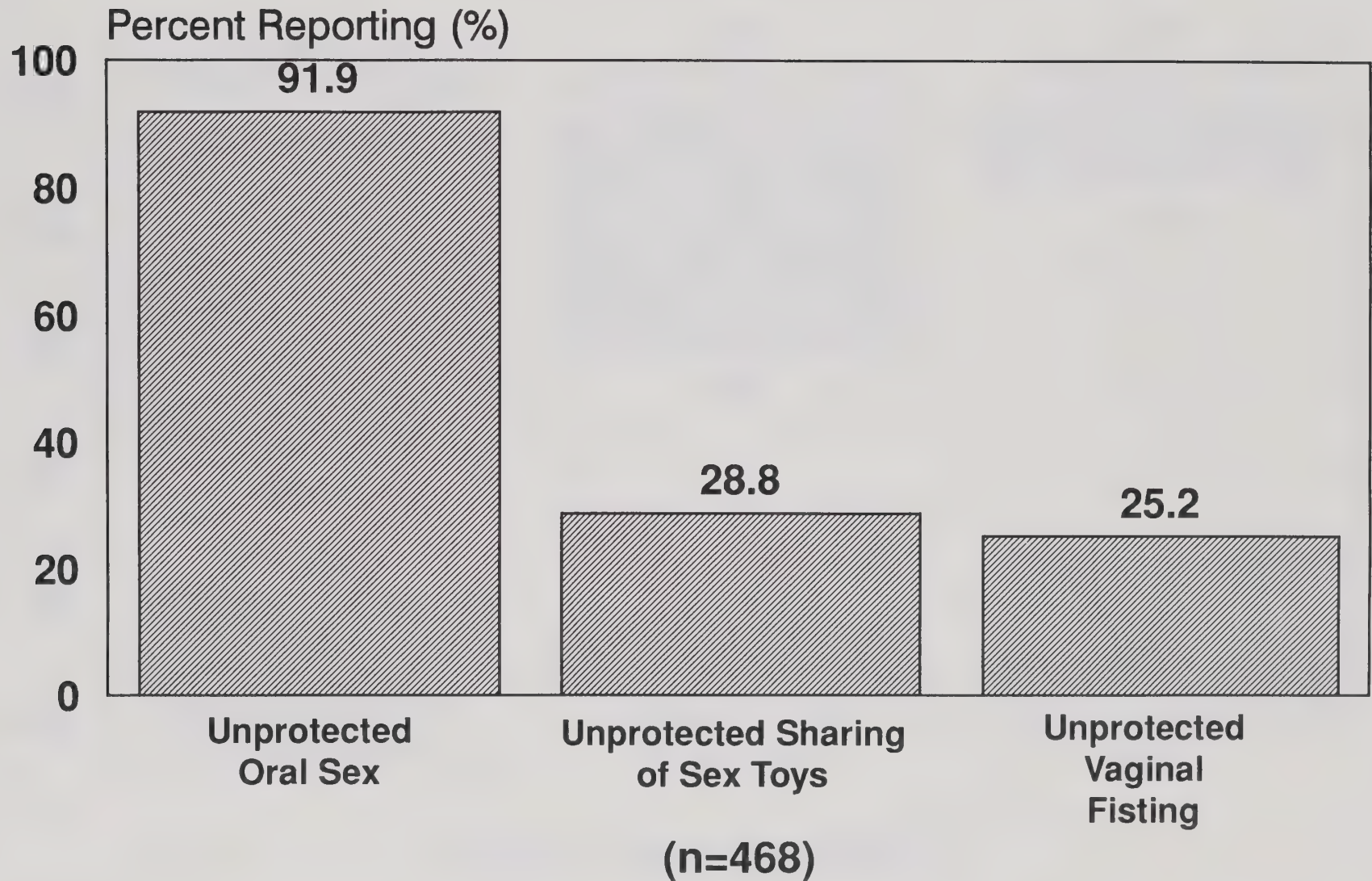
Percent of Participants with Female Sex Partners at Risk for HIV (for women who reported sex with women)



Prevalence of Injection Drug Use and Needle Sharing Among Lesbians and Bisexual Women

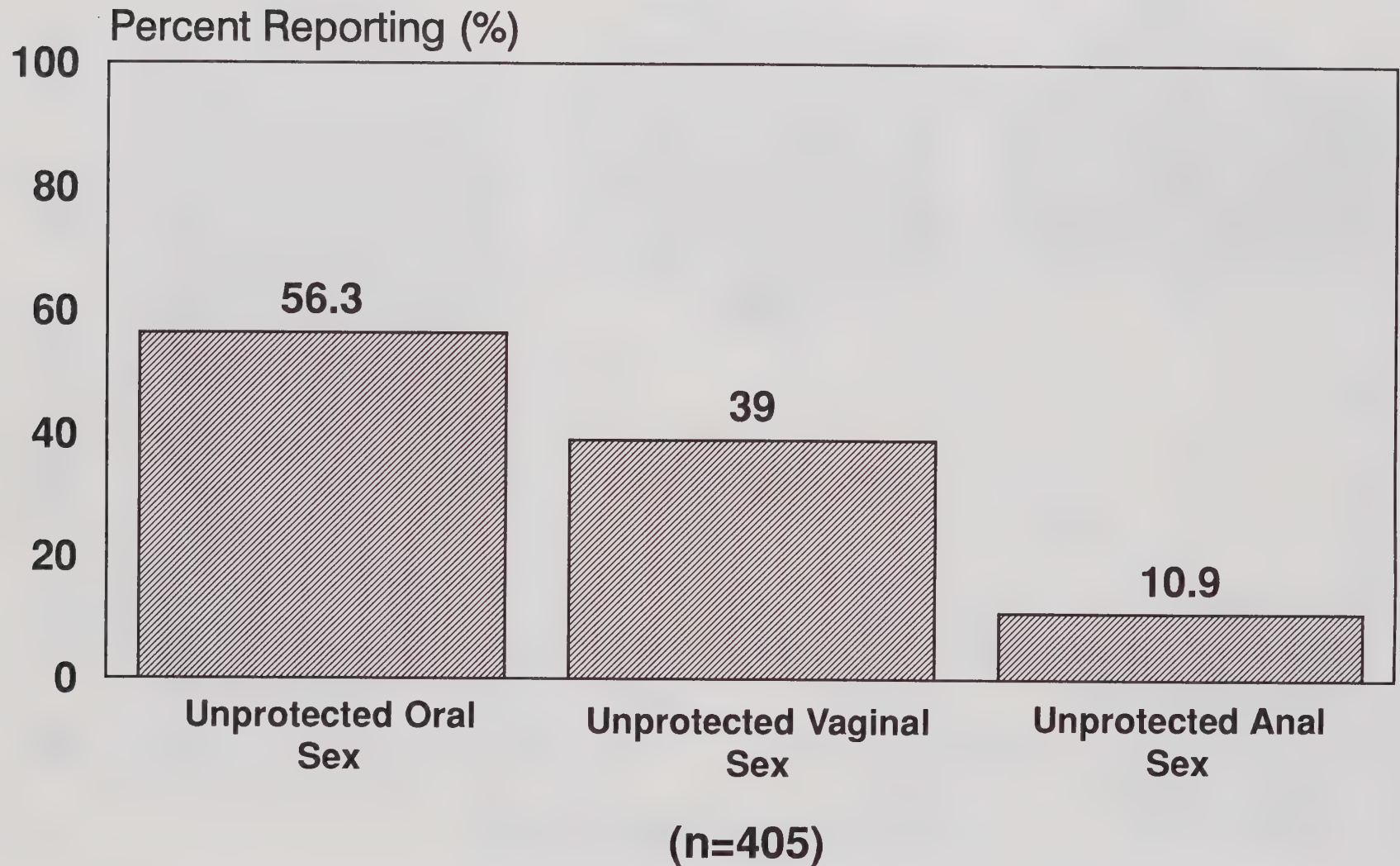


Prevalence of Unprotected Sex with Women During the Past 3 Years



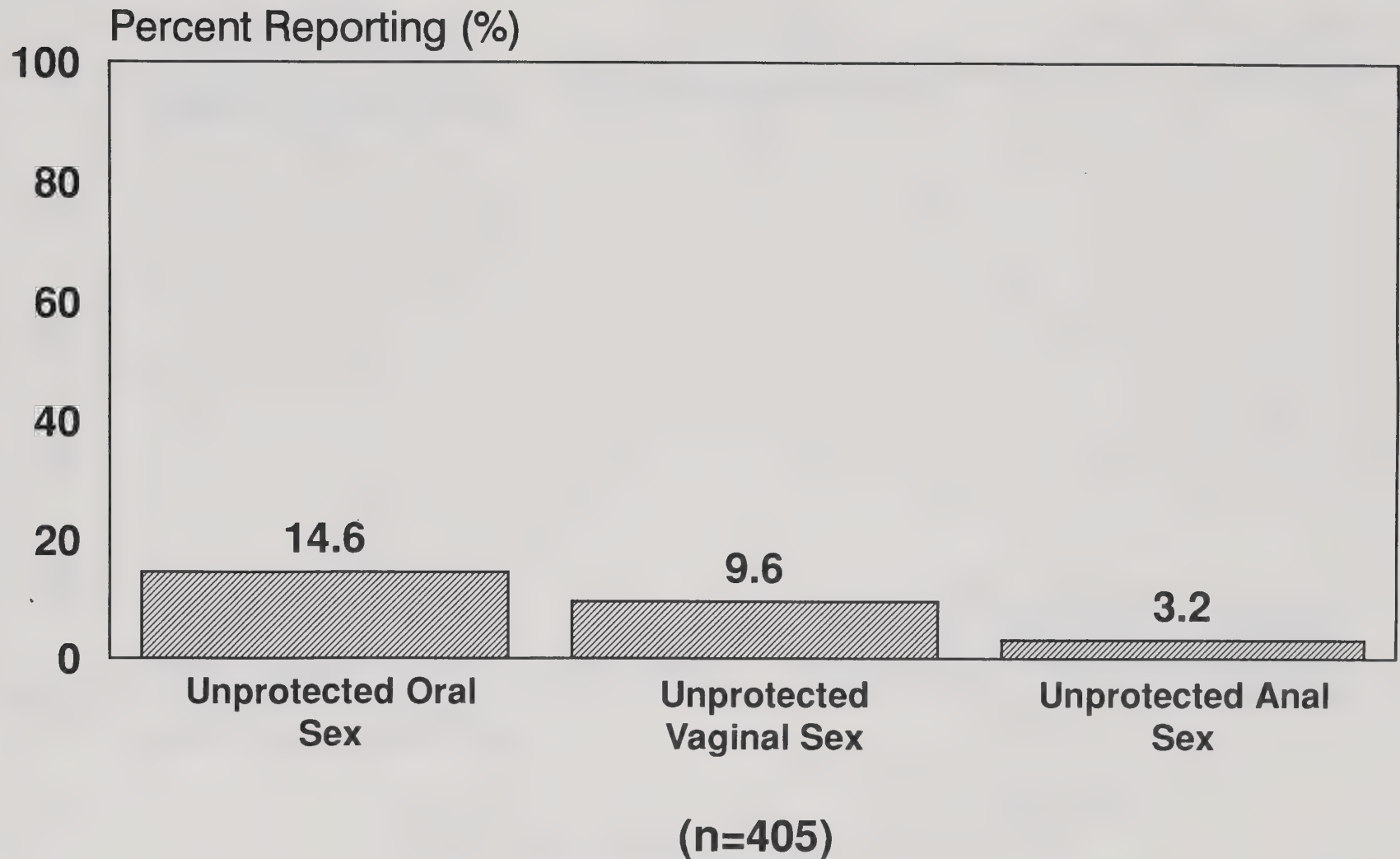
WS: 1993 San Francisco/Berkeley Women's Survey

Prevalence of Unprotected Sex with Men During the Past 3 Years



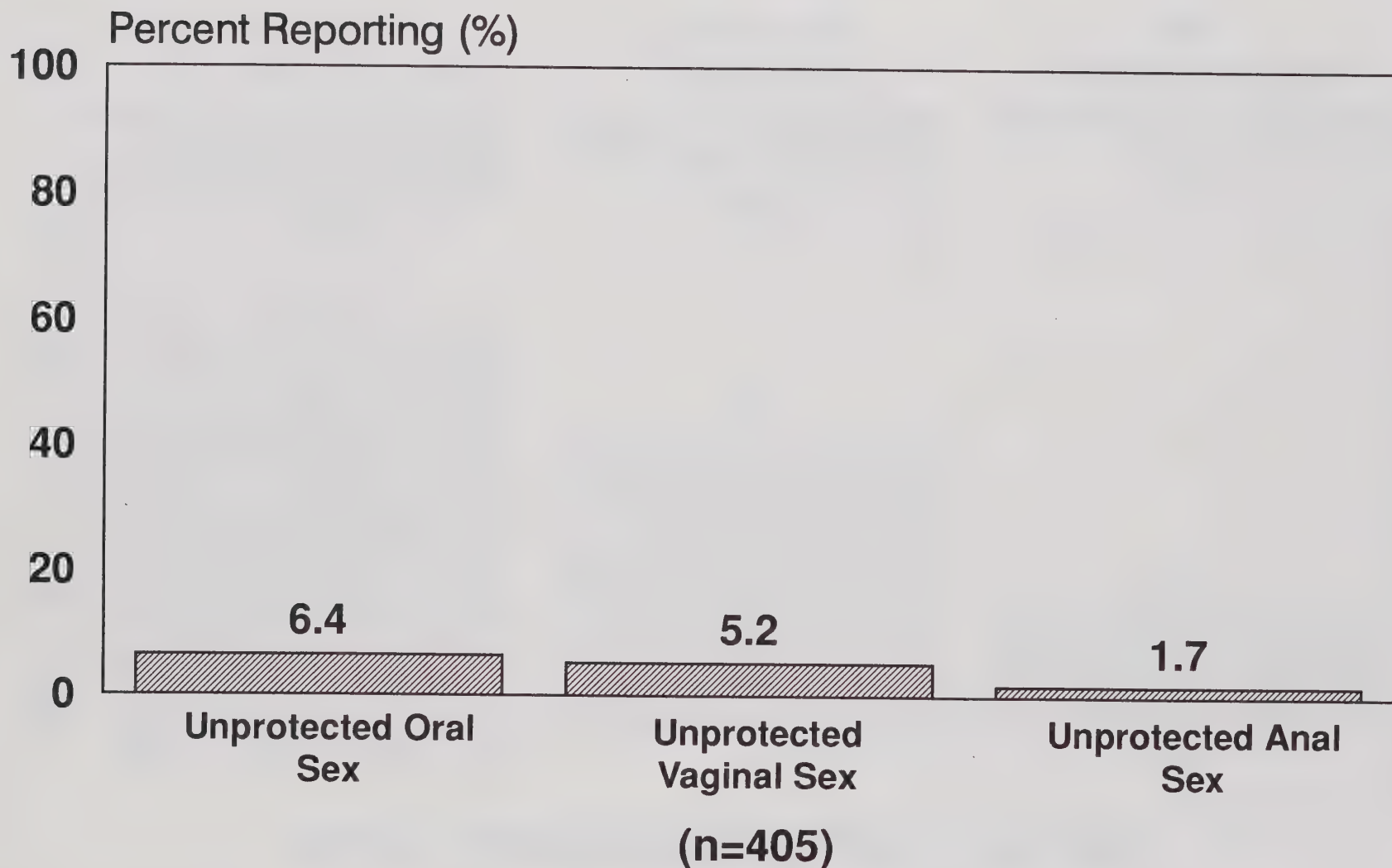
WS: 1993 San Francisco/Berkeley Women's Survey

Prevalence of Unprotected Sex with Gay/Bisexual Men During the Past 3 Years



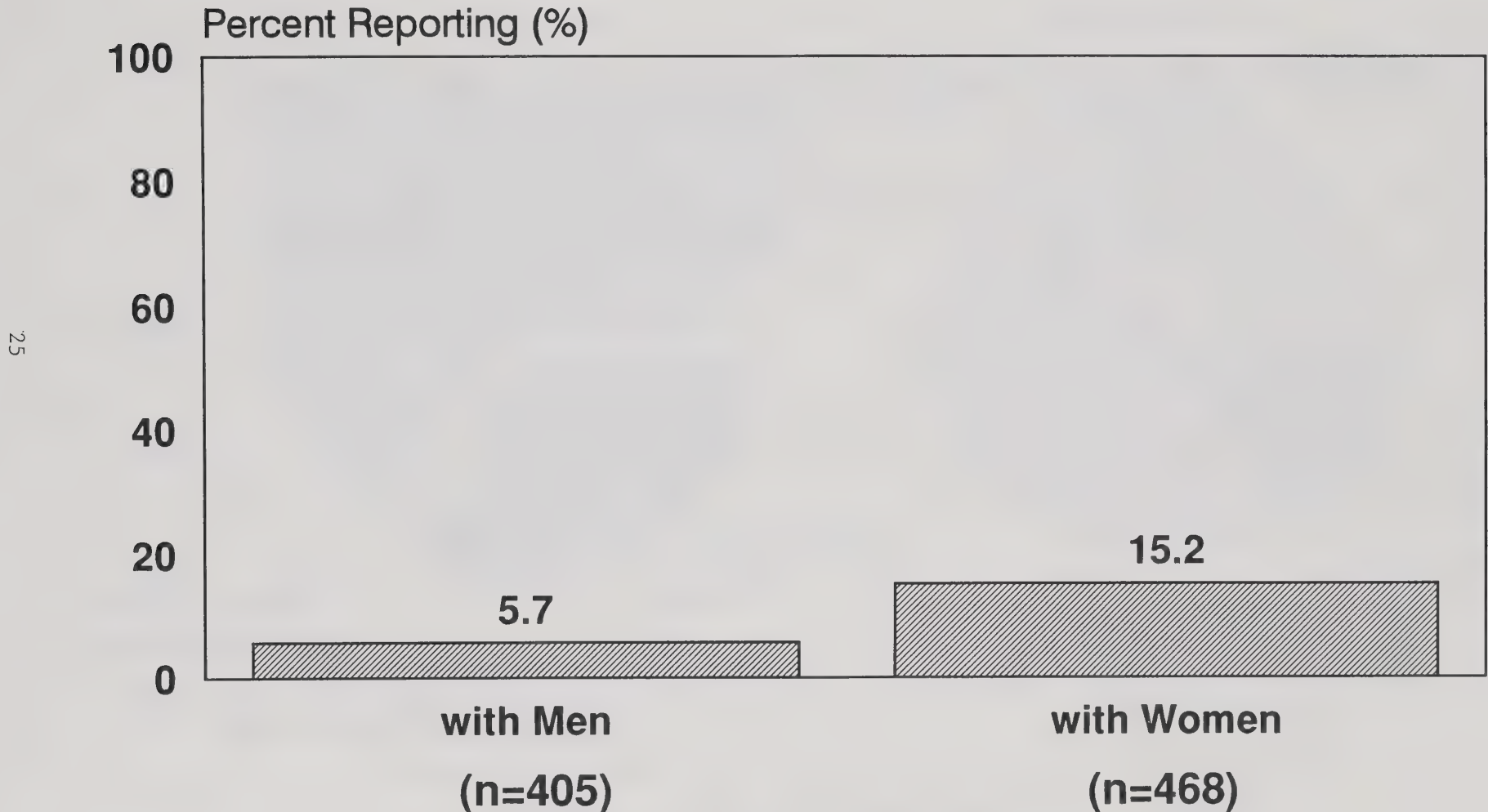
WS: 1993 San Francisco/Berkeley Women's Survey

Prevalence of Unprotected Sex with Male IDUs During the Past 3 Years



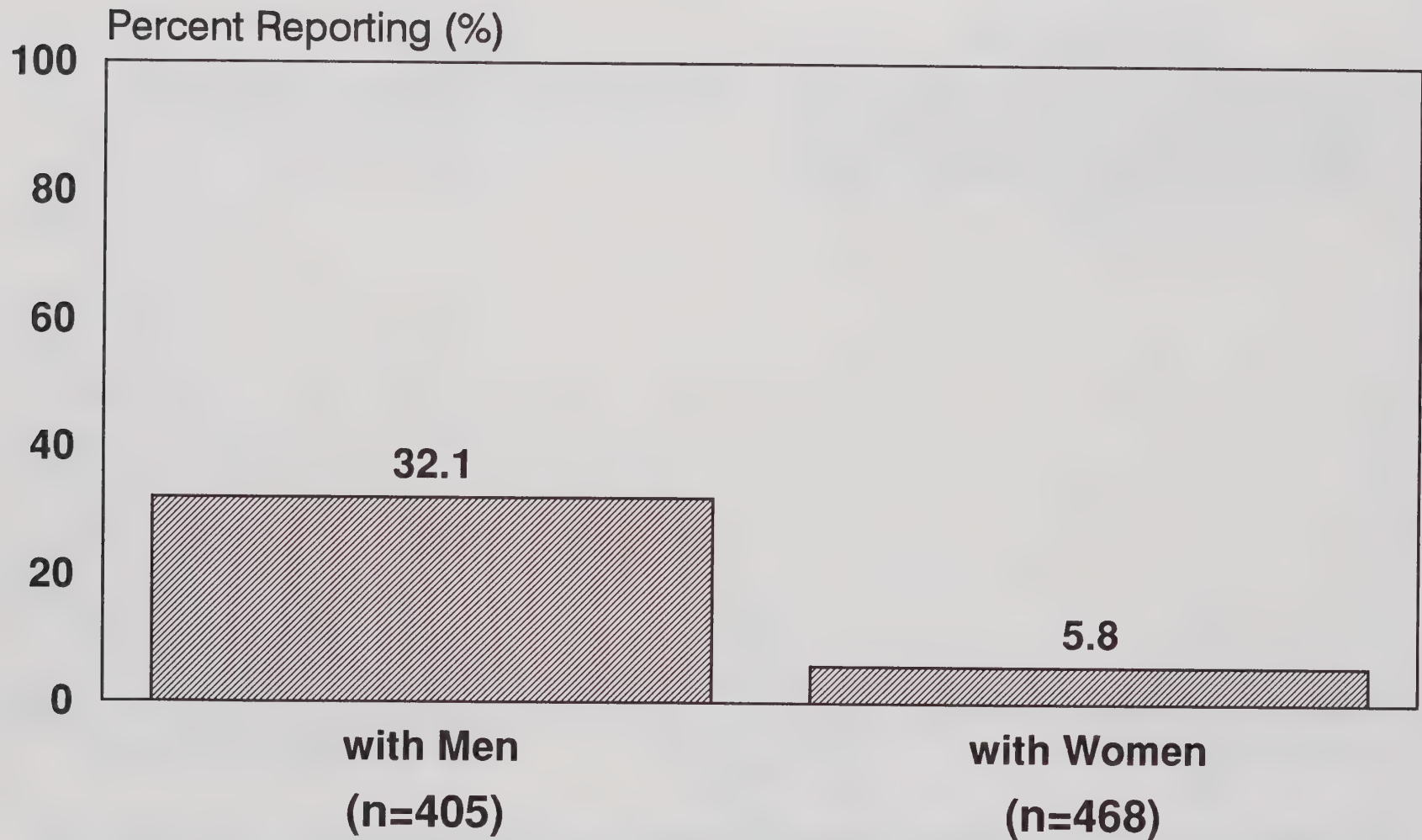
WS: 1993 San Francisco/Berkeley Women's Survey

Prevalence of Piercing, Cutting, or Whipping to the Point of Bleeding Among Survey Participants

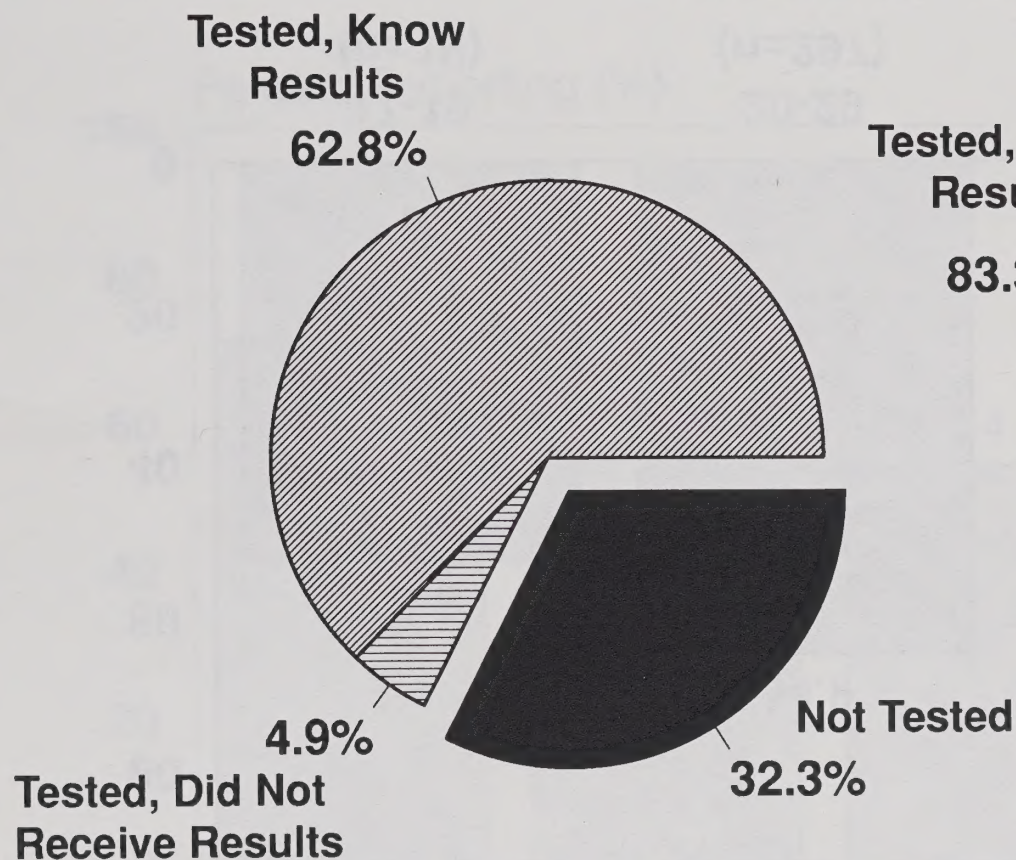


WS: 1993 San Francisco/Berkeley Women's Survey

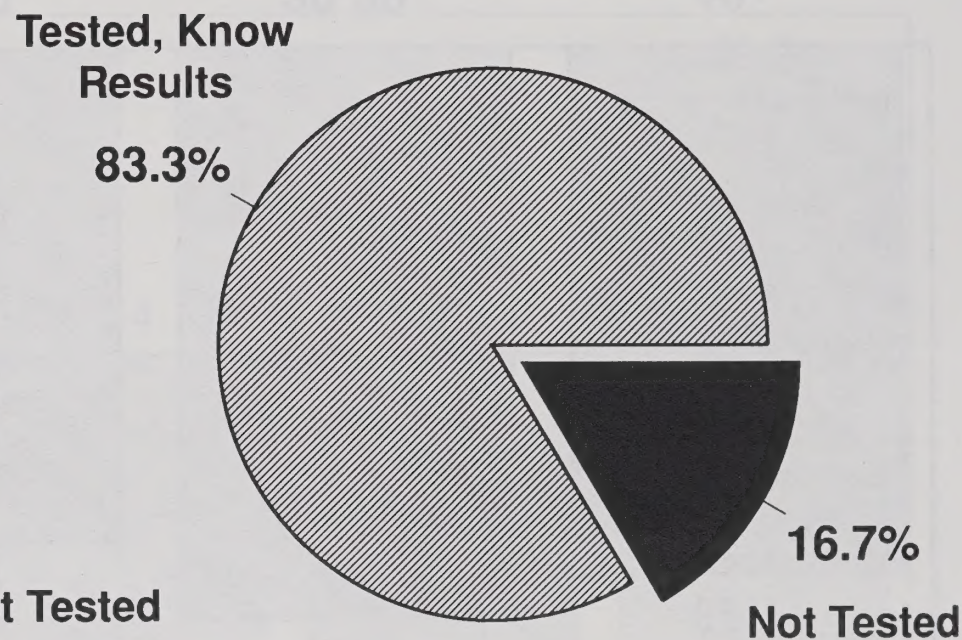
Prevalence of Non-Consensual Sex Among Survey Participants



HIV Antibody Testing History Among Lesbians and Bisexual Women

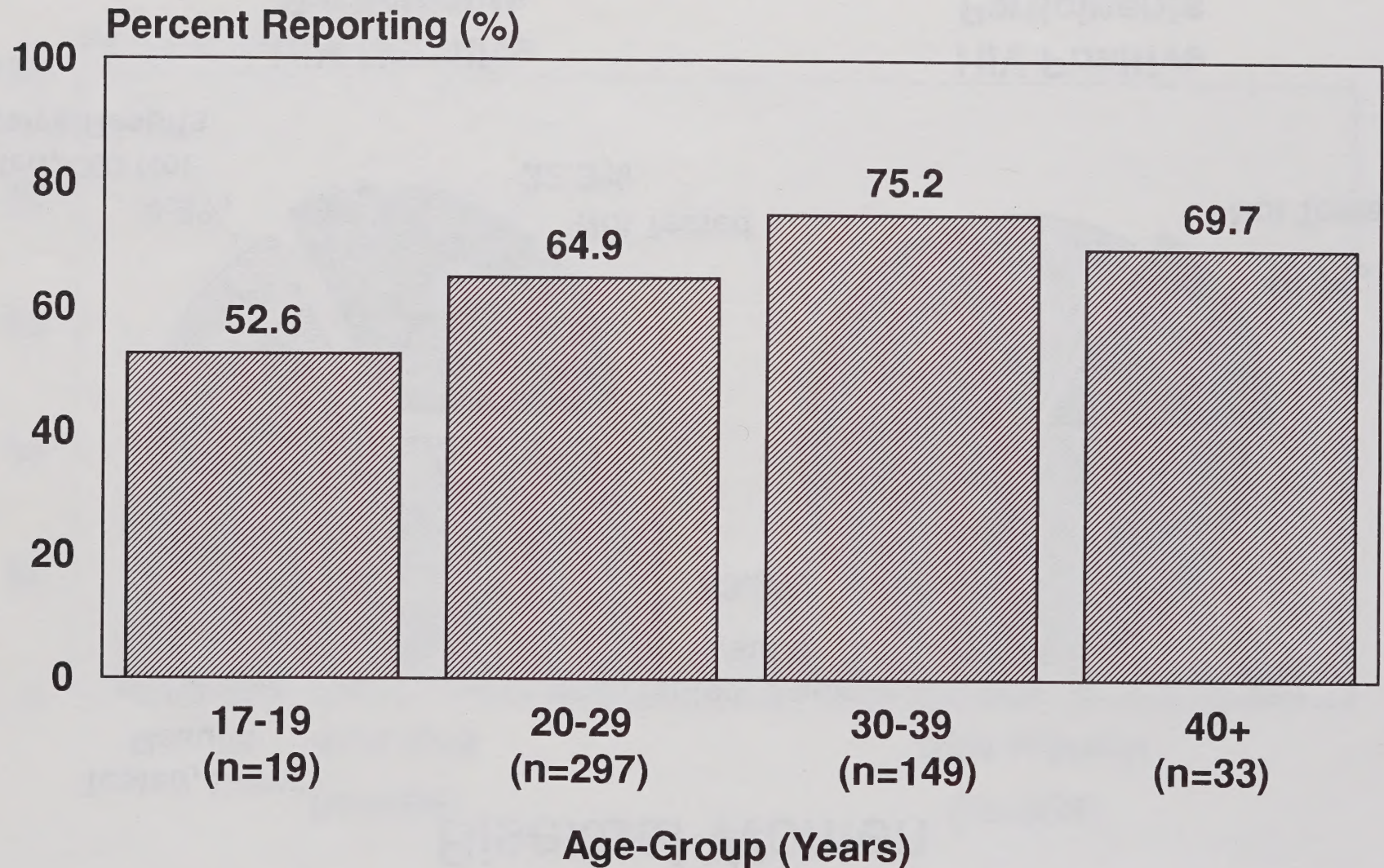


**HIV Negative
Participants
(n=492)**

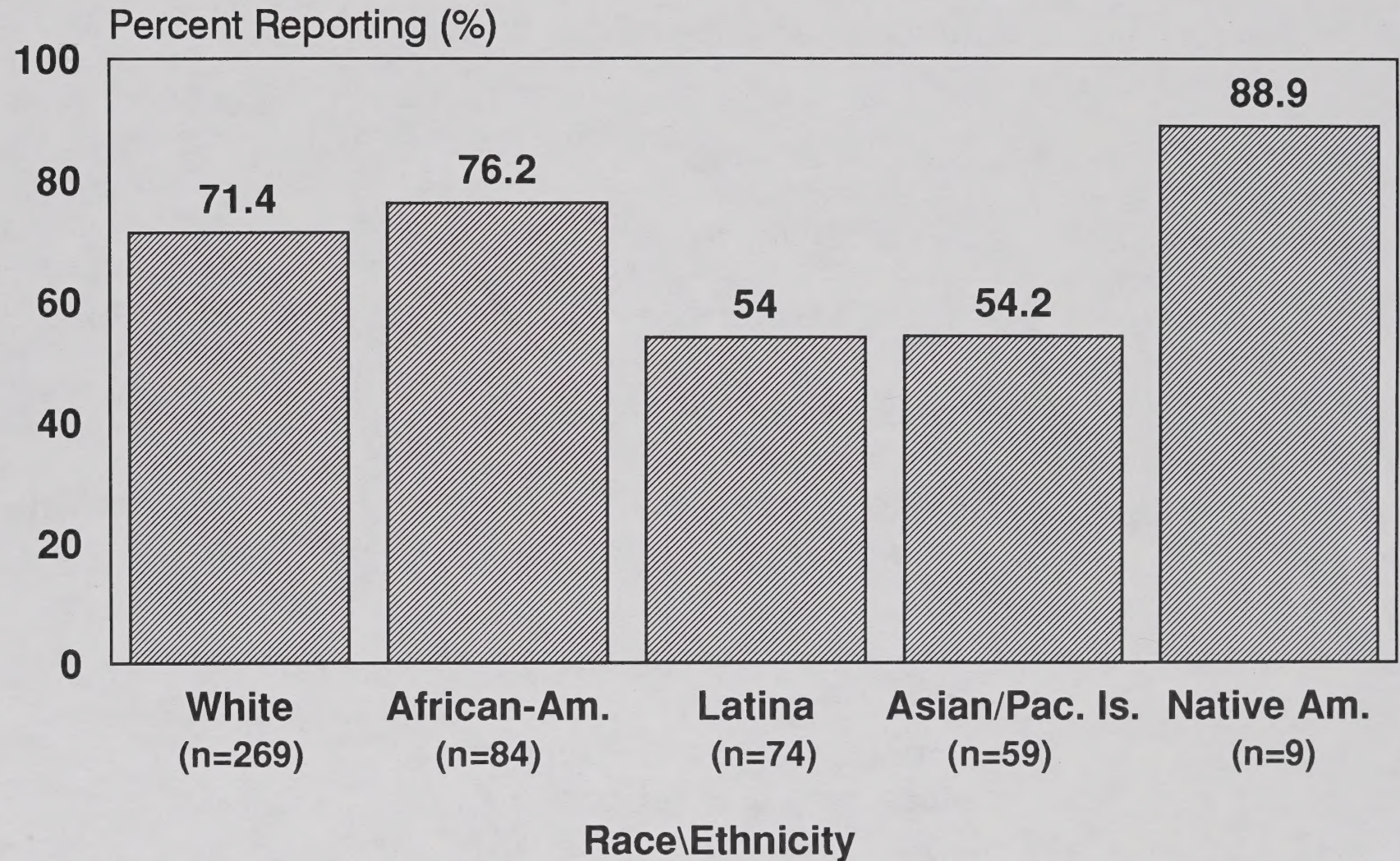


**HIV Positive
Participants
(n=6)**

Percent of Participants Who Have Been Tested for HIV by Age-Group



Percent of Participants Who Have Been Tested for HIV by Race/Ethnicity



THE WOMEN'S SURVEY TEAM AND COLLABORATORS

Principal Investigator: George Lemp, Dr. P.H.

Study Coordinator: Melissa Jones

Epidemiologist: Tim Kellogg

Operations Manager: Giuliano Nieri

Research Associates: Tia Martinez, Peou Lakhana, Sheri Storey

AIDS Office	Advisory Committee	Volunteer Research Assistant	Special Thanks To:
Yesenia Aguirre	Carol Dawson	Noemi Barreto	Berkeley Free Clinic
Marsha Amador	Alina Ever		Irene Carmona
Jason Bishop	Bonnie Faigeles		John Day
Susan Black	Lani Kaahumanu	SFDPH Laboratory	Diane Haas
Susan Buchbinder	Valerie Kegebein		Lyon-Martin Clinic
Vincent Fuqua	Caroline Jean Lee	Dr. Art Back	Kevin McKinney
Delia Garcia	Lori Lee	Brian Louie	Maree Kay Parisi
Danny Givertz	Yvonne Littleton	Ernie Wong	Naomi Prochovnick
Sandra Hernandez	Steve Mills		Lea Sanchez
Laura Hormel	Amanda Newstetter	City of Berkeley	Rita Shimmin
Harry Mar	Marj Plumb	Health Department	Ivy Wagner
Mitch Katz	Lisa Stanley		
Bob Kono	Pat Stevens		
Sean Nguyen	Carmen Vasquez	Laura Anderson	
Henry Padilla	Katie Young	Carolyn Ramey	
Rufina San Juan			

